



## Wayne, New Jersey, Site

### FACT SHEET

*This fact sheet provides information about the Wayne, New Jersey, Site.  
This site is currently managed by the U.S. Army Corps of Engineers but will  
eventually transfer to the U.S. Department of Energy Office of Legacy Management.*

### Site Description and History

The Wayne, New Jersey, Site (also called the Wayne Interim Storage Site) is located at 868 Black Oak Ridge Road in Wayne Township in northern New Jersey at the intersection of Black Oak Ridge Road and Pompton Plains Crossroad, approximately 20 miles north-northwest of Newark. The site is fenced and roughly rectangular in shape, covering approximately 6.5 acres.

In 1948, Rare Earth, Inc., began processing monazite sand to extract thorium and rare earth metals and, in doing so, buried contaminated waste materials on the site. W.R. Grace & Company acquired the facility in 1957, and processing continued until 1971, when the plant closed. Applied Health Physics, Inc., decontaminated the buildings in 1974, and the U.S. Nuclear Regulatory Commission released the property for unrestricted use in 1975. An aerial radiological survey, requested by the New Jersey Department of Environmental Protection, was conducted in 1981 and identified elevated radiation levels on the site and west along Sheffield Brook. Subsequent walk-over surveys conducted in 1982 confirmed that concentrations of surface radionuclide contamination were greater than those acceptable under then-current U.S. Department of Energy (DOE) remedial action guidelines. The Wayne Site was designated for remedial action under the DOE Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1984. That same year, DOE purchased the site to use for storage of contaminated vicinity property material, and the U.S. Environmental Protection Agency listed the site on the National Priorities List (NPL). Thorium was the principal contaminant at the site; radium, uranium, and nonradioactive metals were also identified there. Two types of contaminated media were present: source media (soil, processing waste, and bulk waste) and building material from a structure on the site.

Remedial action at off-site locations was conducted between 1985 and 1987. Radioactive contamination was removed from three areas in 1986: a portion of Sheffield Brook, the front yard of the former W.R. Grace



Location of the Wayne, New Jersey, Site

& Company property, and a small area on the right-of-way of Pompton Plains Crossroad. In addition, six more areas were remediated in 1985 and 1987: Wayne Township Park, the back yard of 112 Deerfield Road, the side and front yards of 34 Farmingdale Road, the soil under Farmingdale Road, a portion of Sheffield Brook, and the mouth of Sheffield Brook. Approximately 14,900 cubic yards were excavated in two phases over 161,600 square feet of these latter six areas. The excavated off-site materials were placed in an interim storage pile built on top of the process waste pits at the Wayne Site because a permanent waste disposal facility was not available at the time.

The last of 23 vicinity properties was remediated in 1993. In 1997, approximately 12,000 cubic yards of contaminated materials were removed from the interim storage pile and shipped to a commercial disposal facility. After completing an Engineering Evaluation/Cost Analysis in 1998, the U.S. Army Corps of Engineers

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(USACE) removed and disposed of 40,000 cubic yards (of an estimated total of 58,000 cubic yards) of contaminated material. This included waste pit materials and affected soil and debris beneath the footprint of the former interim storage pile. The remaining contaminated material (about 18,000 cubic yards) was cleaned up as part of the Record of Decision signed in 2000. USACE began a long-term ground water monitoring program in 2002; monitoring continued through 2006.

During preparations for site closeout, a paper review of site information identified the need for additional remediation at two previously remediated vicinity properties. Those properties had been remediated in the 1980s to cleanup criteria that were less stringent than those specified in the Record of Decision. The additional work was completed under an Explanation of Significant Difference to the Record of Decision. USACE completed all remedial action at the Wayne Site in 2003.

## Regulatory Setting

The U.S. Atomic Energy Commission, a predecessor agency to DOE, established FUSRAP in March 1974 to evaluate radioactive contamination at sites where work was performed to develop the nation's nuclear weapons and early atomic energy program. After reviewing records and radiometric surveys for more than 600 sites connected with the nuclear weapons program, DOE identified 46 sites that required cleanup, including the Wayne Site. Congress transferred responsibility for FUSRAP site characterization and remediation to the USACE in 1997. DOE retains responsibility for long-term surveillance and maintenance of remediated FUSRAP sites.

The Wayne Site was initially remediated to criteria in *Interim Soil Limits for D&D Projects*, (pre-FUSRAP standards). A notice of cleanup certification for the site was published in the *Federal Register* on October 29, 1984. Additional Remediation was performed under the 2000 *Record of Decision for the Wayne Interim Storage Site* and the 2003 *Record of Decision Explanation of Significant Difference for the Wayne Interim Storage Site*. USACE activities were conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Responsibility for the Wayne Site will transfer from the USACE to the DOE Office of Legacy Management upon deletion of the site from the NPL.

## Current Site Conditions

Results of the 5-year ground water monitoring program indicated that site activities did not degrade ground water quality. Therefore, the site will meet the criteria for unrestricted use. The U.S. Environmental Protection Agency Region II completed a pre-final inspection in September 2003 and verified that remedial action was completed at the Wayne Site and vicinity properties. NPL delisting is pending.

In 2006, DOE sold the property to Wayne Township for park and recreational use under the National Park Service Land to Parks Program.

## Legacy Management Activities

Until regulatory closeout is completed, DOE will impose a ground water use restriction as a best management practice. Upon delisting from the NPL, no monitoring, maintenance, or site inspections are expected to be required for the Wayne Site. Legacy Management responsibilities will consist of managing site records and responding to stakeholder inquiries.

## Contacts

Documents related to the Wayne Site are available on the DOE Legacy Management website at <http://www.LM.doe.gov/land/sites/nj/wayne/wayne.htm> and <http://www.nan.usace.army.mil/business/prjlinks/fusrap/index.htm>.

For more information about DOE Legacy Management activities at the Wayne Site, contact

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